

**FAIRFAX COUNTY  
BOARD OF SUPERVISORS  
July 26, 2016**

**ADDENDUM  
AGENDA**

**ACTION ITEMS**

12

Support Efforts to Modify Flight Paths South of Ronald Reagan  
Washington National Airport

ACTION - 12

Support Efforts to Modify Flight Paths South of Ronald Reagan Washington National Airport

ISSUE:

Board support of efforts to modify flight paths south of Ronald Reagan Washington National Airport to keep aircraft more centered over the Potomac River on departures, as well as to modify waypoints to move departing aircraft farther down the Potomac River before turning east or west, to reduce the impact of aircraft noise on Fairfax County residents.

RECOMMENDATION:

The County Executive recommends the Board support efforts to modify flight paths south of Ronald Reagan Washington National Airport to keep aircraft more centered over the Potomac River on departures, as well as to modify waypoints to move departing aircraft farther down the Potomac River before turning east or west, to reduce the impact of aircraft noise on Fairfax County residents. The County Executive recommends that the Board also encourages outreach efforts be undertaken by the Federal Aviation Administration or other implementing agencies to any potentially impacted neighborhoods and stakeholders during the consideration of the change to these flight paths, or any flight paths in the future. Notice of this action will be conveyed to the Reagan National Airport Community Working Group, the Metropolitan Washington Airports Authority, the Federal Aviation Administration, and other stakeholders who may express interest.

TIMING:

Action should be taken on this item on July 26, 2016, to provide this supporting information to the Reagan National Airport Community Working Group, the Metropolitan Washington Airports Authority, and the Federal Aviation Administration.

BACKGROUND:

The Federal Aviation Administration (FAA) has been working on the implementation of the Next Generation Air Transportation System (NextGen) throughout the country over the past several years. NextGen, which is designed to improve airspace safety and efficiency, can result in fewer flight delays and less fuel consumption by airplanes, but has also resulted in flight paths concentrated over certain communities. There have

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been such concentrations of flight paths for operations at Ronald Reagan Washington National Airport (DCA), including a concentration of flight paths for departures to the south of the airport that has resulted in a significant increase in noise over residential areas in the County that are along those flight paths.

The Reagan National Community Noise Working Group was established in 2015 to facilitate discussions with citizens, the FAA, and airlines to address noise issues. The Working Group is comprised of community members appointed by elected officials from local jurisdictions, including two members and two alternates representing Fairfax County, and airline representatives. Metropolitan Washington Airports Authority (MWAA) and FAA staff serve as non-voting, advisory members. The Working Group meets to share ideas, discuss potential strategies and evaluate potential solutions to this issue. Recommendations approved and endorsed by the Working Group are forwarded periodically to the FAA for consideration.

On April 14, 2016, the Working Group met and voted to endorse a concept of modifying flight paths south of DCA to keep aircraft more centered over the Potomac River on departures, as well as modifying waypoints to move departing aircraft further down the Potomac River before turning east or west. The vote included five members in support (including both Fairfax County representatives), none in opposition, three abstentions, and six absent during the vote. As some Working Group members representing impacted areas were not present, the Draft Recommendation also noted that a vote on a firm recommendation for the FAA to pursue such changes is pending consultation with Working Group members representing communities that would be impacted by these adjustments, as well as consultations with the airlines serving DCA (Attachment 1).

On July 19, 2016, Margaret McKeough, MWAA Chief Operating Officer, provided a presentation on aircraft noise issues at the Board Transportation Committee (Attachment 2). During the discussion, it was noted that changing a flight pattern to improve noise issues at certain locations could have detrimental impacts at other locations. In the instance of the proposed changes to the south flow departures at DCA could impact arrivals and departures at DCA, impacting neighborhoods along the Potomac River.

FISCAL IMPACT:

There is no fiscal impact to the County as a result of these comments.

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ENCLOSED DOCUMENTS:

Attachment 1 - Reagan National Community Noise Working Group Draft  
Recommendation #3

Attachment 2 – Metropolitan Washington Airports Authority July 19, 2016, Presentation  
to the Board Transportation Committee

STAFF:

Robert A. Stalzer, Deputy County Executive

Tom Biesiadny, Director, Fairfax County Department of Transportation (FCDOT)

Todd Wigglesworth, Chief, Coordination and Funding Division, FCDOT

Noelle Dominguez, Senior Transportation Planner, FCDOT

**Reagan National Airport  
Community Working Group  
Draft Recommendation # 3  
(Approved April 14, 2016)**

The Working Group endorses the concept of the FAA modifying flight paths south of DCA to keep aircraft more centered over the Potomac River on departures, as well as modifying waypoints to move departing aircraft farther down the Potomac River before turning east or west. A vote on a firm recommendation for the FAA to pursue such changes is pending consultation with Working Group members representing communities that would be impacted by these adjustments, as well as consultations with the airlines serving DCA.



**Presentation for:**

**Fairfax County  
Board of Supervisors  
Transportation Committee**

**July 19, 2016**

## MWAA and Reagan National Airport (DCA)

### ✈ Background

- ✈ DCA opened in 1941 and has always operated as a commercial airport (24/7)
- ✈ DCA and IAD are the only U.S. commercial airports owned by federal government
- ✈ MWAA created by regional compact with DC and Virginia to operate, develop airports
- ✈ Important to maintain a 'balanced' 2-airport system
- ✈ Regulatory decisions and the economy are both contributors to the current operational imbalance between Reagan National and Dulles International airports
- ✈ Operational imbalance causes cascading economic problems

### ✈ Key Regional Economic Driver (Aviation, Toll Road, Rail)

- ✈ MWAA operations account for 4.5 percent of regional GDP
- ✈ Provide or support more than 387,000 jobs
- ✈ Provide or support more than \$15 billion in labor income
- ✈ Provide or support more than \$3 billion in Tax Revenue which includes \$1.92 billion of State and Local taxes
- ✈ Provide or support more than \$20 billion in business revenue

(source: 2012 MWAA Economic Impact Study)



## Reagan National Airport (DCA) Stakeholder Roles and Responsibilities

- ➔ **FAA has exclusive control of airspace and aircraft (flight paths and altitudes)**
  - ➔ FAA Regional Operational Restrictions:
    - ➔ Federal Prohibited Airspace (P-56): White House, U.S. Naval Observatory and the U.S. National Mall
  - ➔ Potomac and Anacostia river corridors have been the recommended flight paths since jets began operating at DCA in 1966
  - ➔ Communities near the rivers experience the most aircraft noise
- ➔ **Airlines are responsible for managing their individual flight schedules and aircraft fleet mix**
- ➔ **Local government jurisdictions are responsible for land-use zoning around airports**
- ➔ **MWAA is responsible for airport facility development, maintenance and leasing**
  - ➔ Oversees DCA Nighttime Noise Rule:
    - ➔ **DCA Nighttime Noise Rule is not a curfew**
    - ➔ MWAA identifies compliant and non-complaint (louder) aircraft based on the FAA's Noise Certification data for each aircraft type, model, engine and weight
    - ➔ MWAA levies civil penalties on non-compliant aircraft that operate 10 p.m. - 6:59 a.m.
  - ➔ Provides a level playing field for all airline tenants to operate successfully



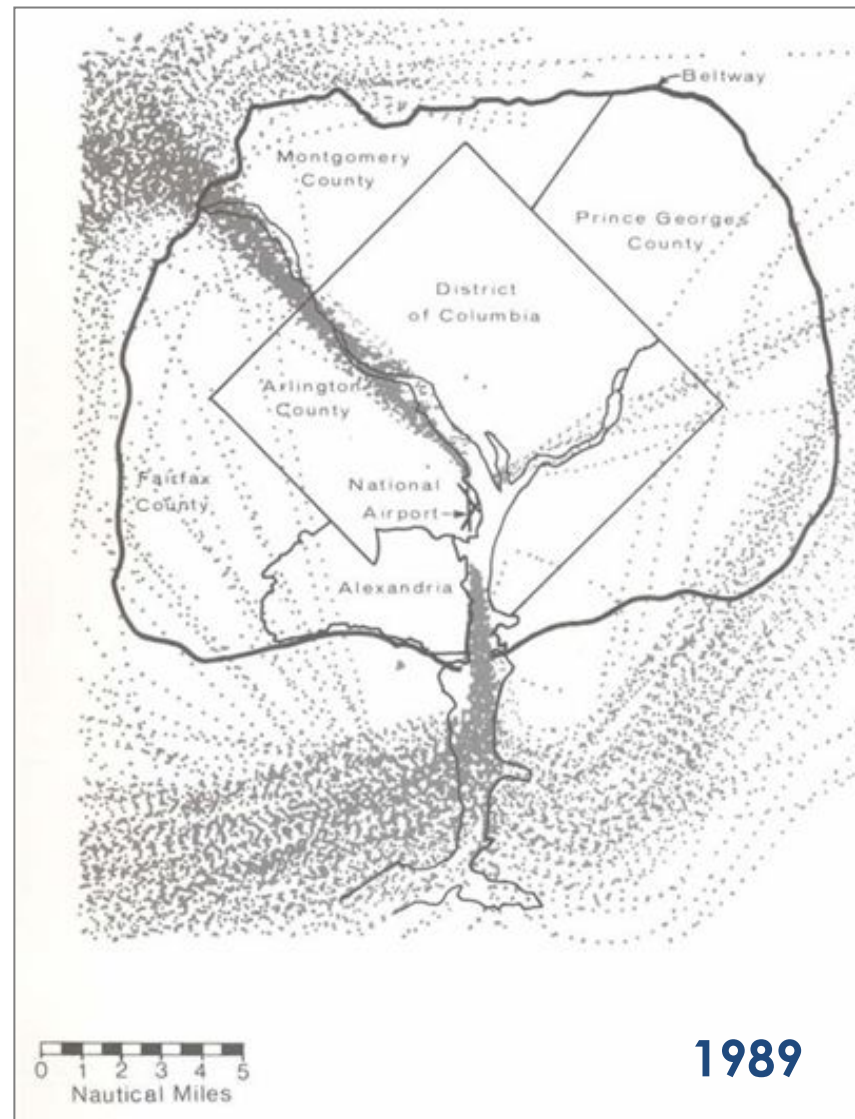


## Reagan National Airport (DCA) Recent Changes

- ➔ **Growth in demand for air travel between 10 p.m. - 7a.m.**
  - ➔ Demand for early morning and late-night travel has resulted in more arrivals and departures between 10 p.m. - 7 a.m.
  - ➔ Aviation technology has improved since the DCA Nighttime Noise Rule was implemented in 1981, and the majority of modern aircraft now noise comply with the rule
  - ➔ Airport Noise and Capacity Act of 1990 limits U.S. airports from imposing new noise-based operational restrictions on quieter (stage 3) aircraft, including airport hours of operation, number of aircraft operations or aircraft noise levels
  
- ➔ **D.C. Metroplex (NextGen) procedure changes related to FAA airspace re-design**
  - ➔ FAA continues the implementation of its Next Generation Air Transportation System program (NextGen) to improve airspace safety and efficiency, including modified departures procedures in the D.C. airspace (D.C. Metroplex)
    - ➔ Benefits: Fewer residents are exposed to aircraft noise
    - ➔ Benefits: Fewer flight delays, less fuel consumption, less pollution
    - ➔ Challenges: Flight paths concentrated over certain communities
  - ➔ Procedure changes have resulted in additional complaints from residents living in proximity to flight corridor changes, locally and nationally



## Historical Flight Tracks Over Potomac and Anacostia River Corridors



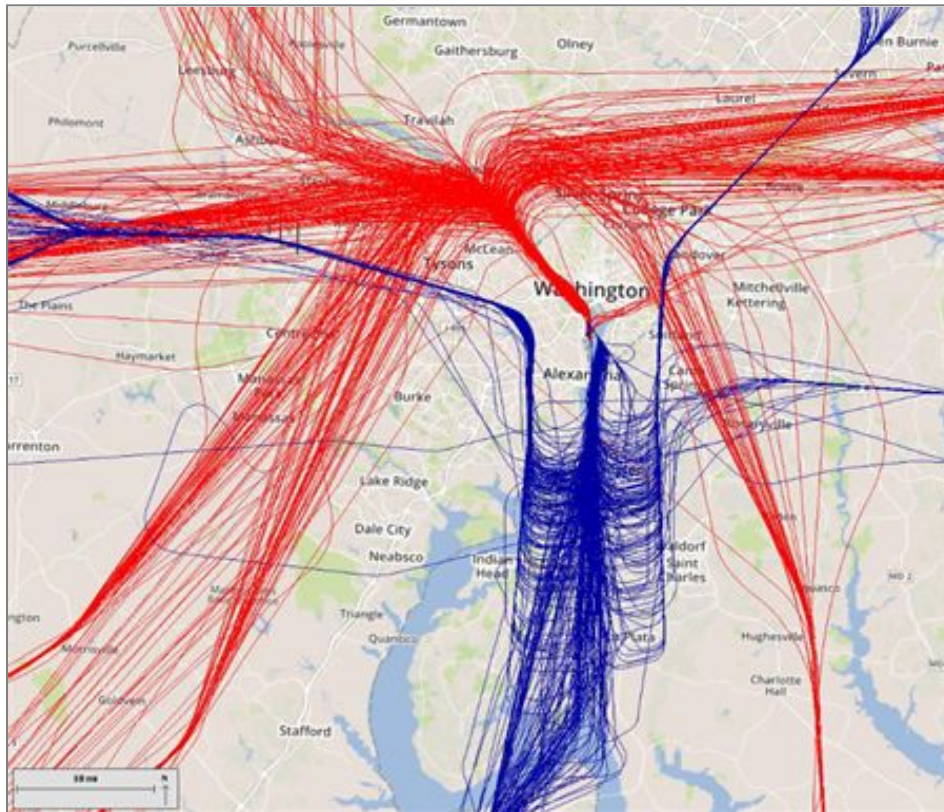
# Reagan National (DCA) - North Flow Arrivals and Departures

## NextGen Procedure Changes

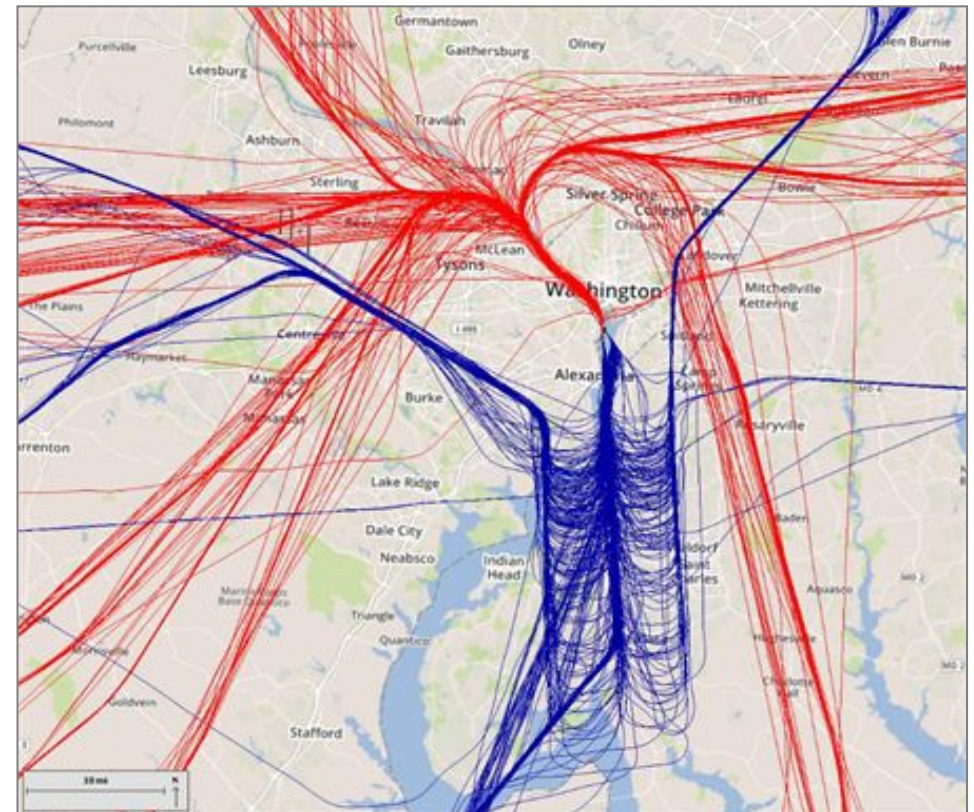
### 2012 (Pre) versus 2015 (Post)



Pre-NextGen: June 26, 2012



Post-NextGen: September 14, 2015





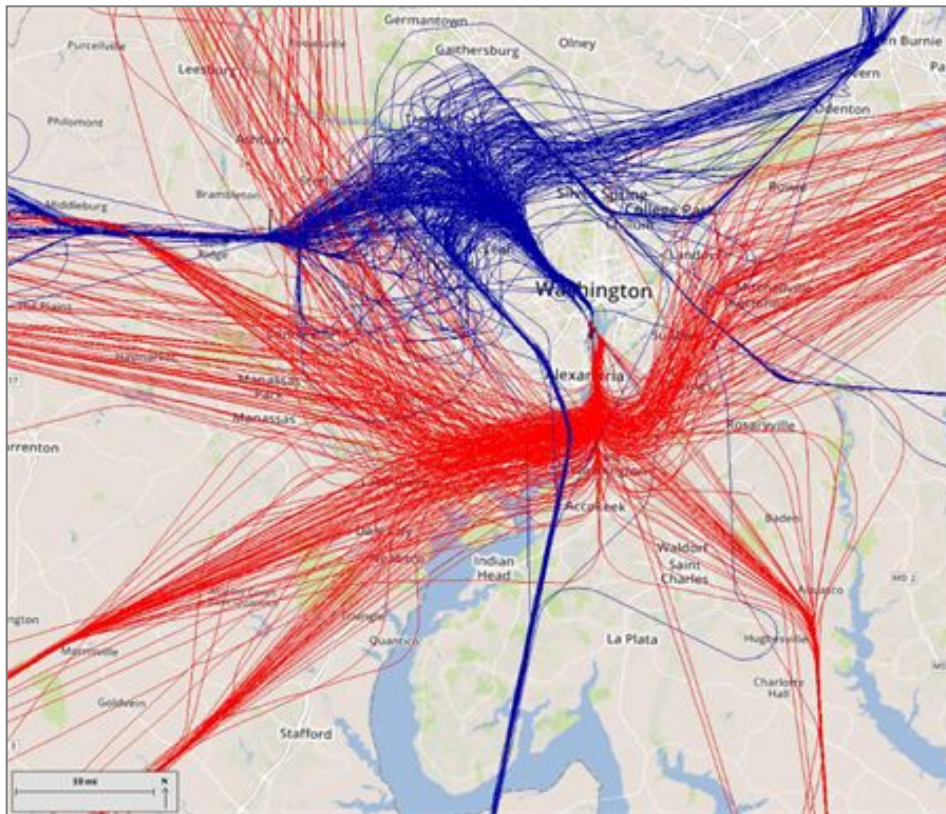
# Reagan National (DCA) - South Flow Arrivals and Departures

## NextGen Procedure Changes

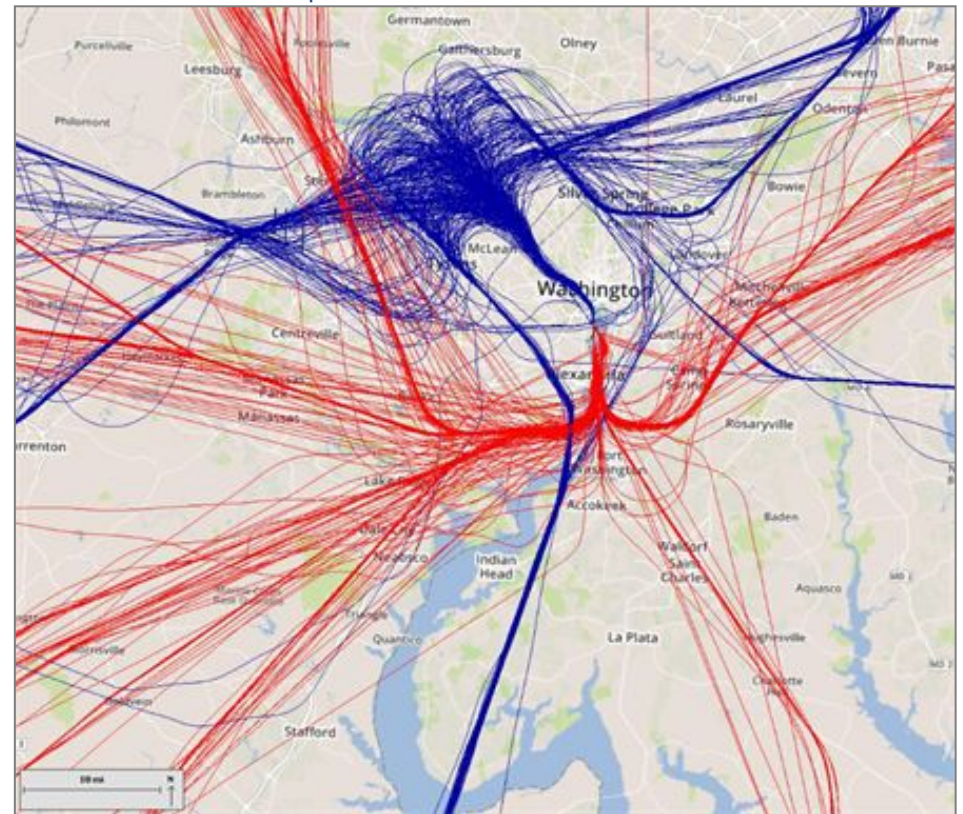
### 2012 (Pre) versus 2015 (Post)



Pre-NextGen: June 28, 2012



Post-NextGen: September 8, 2015





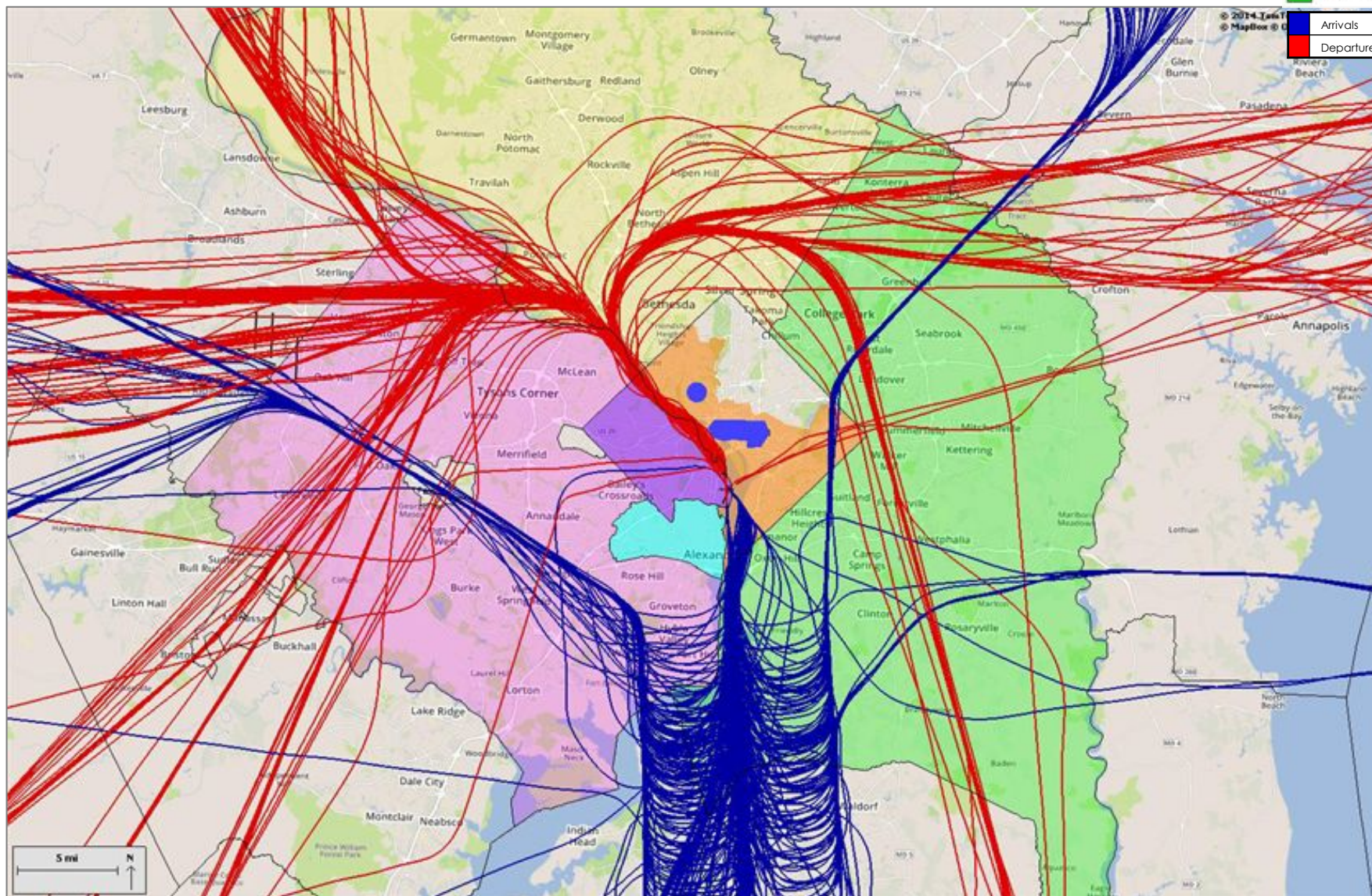
## Reagan National (DCA) - Current North Flow Arrivals and Departures

Jurisdiction Boundaries

Current (Post-NextGen): June 9, 2016

- Prohibited Airspace (P-56)
- DC Wards 2, 3, 6, 7 & 8
- City of Alexandria
- Arlington
- Fairfax County
- Montgomery County
- Prince George's County

- Arrivals
- Departures





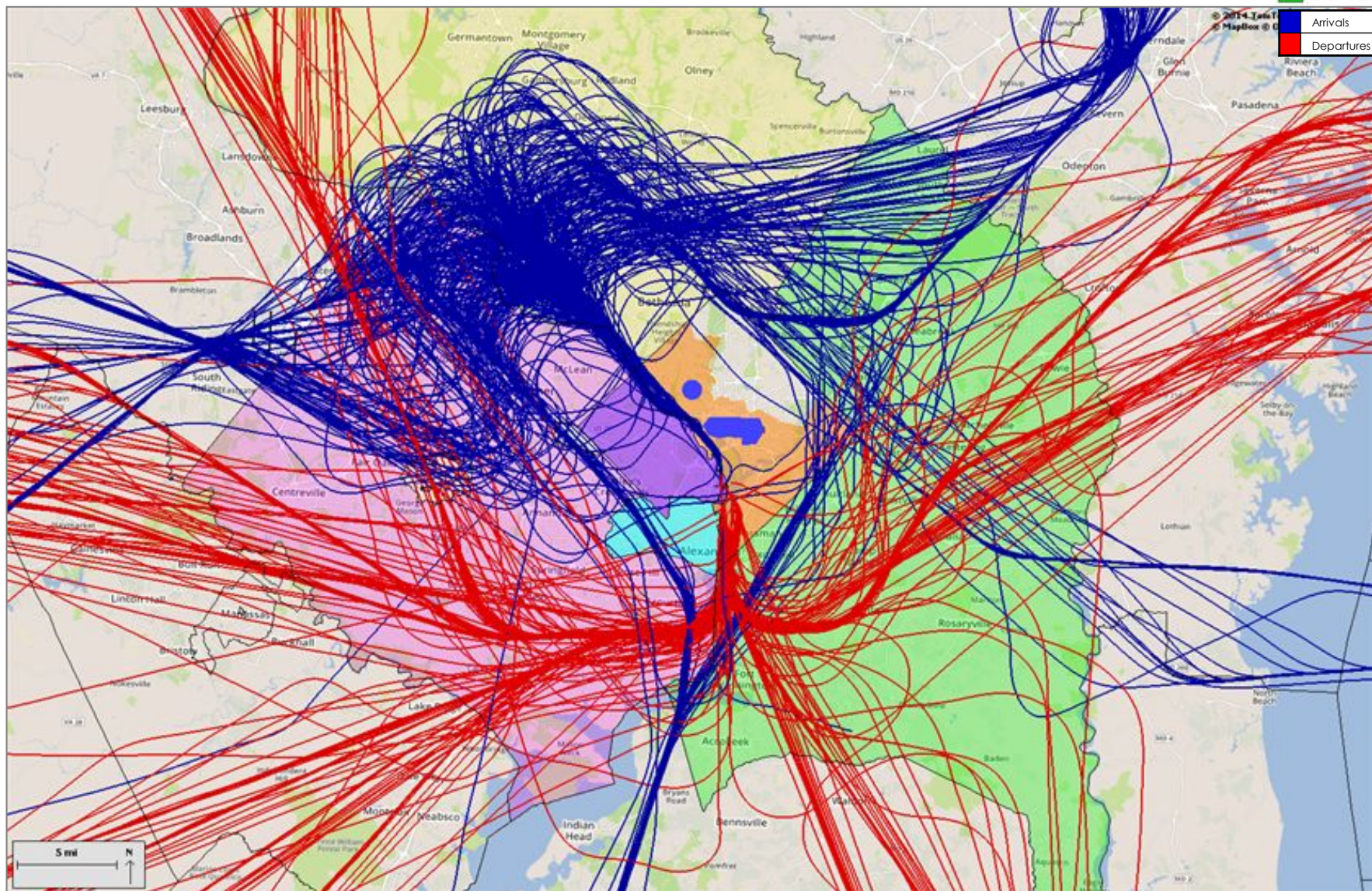
## Reagan National (DCA) - Current South Flow Arrivals and Departures

Jurisdiction Boundaries

Current (Post-NextGen): June 2, 2016

- Prohibited Airspace (P-56)
- DC Wards 2, 3, 6, 7 & 8
- City of Alexandria
- Arlington
- Fairfax County
- Montgomery County
- Prince George's County

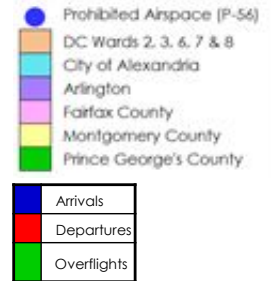
- Arrivals
- Departures



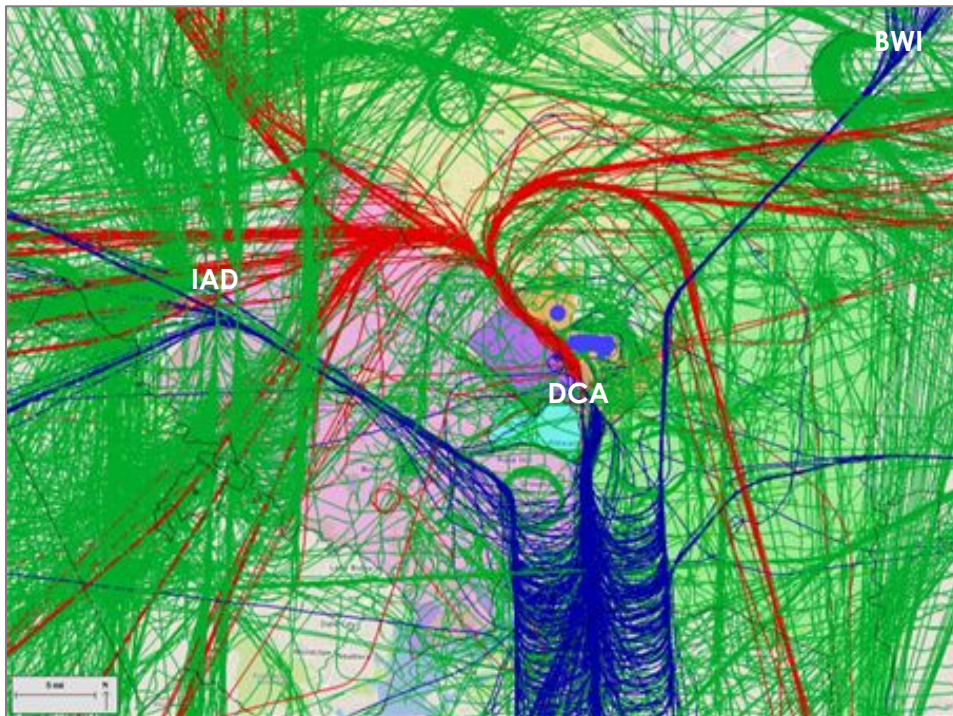


## Daily D.C. Regional Airspace - All Operations

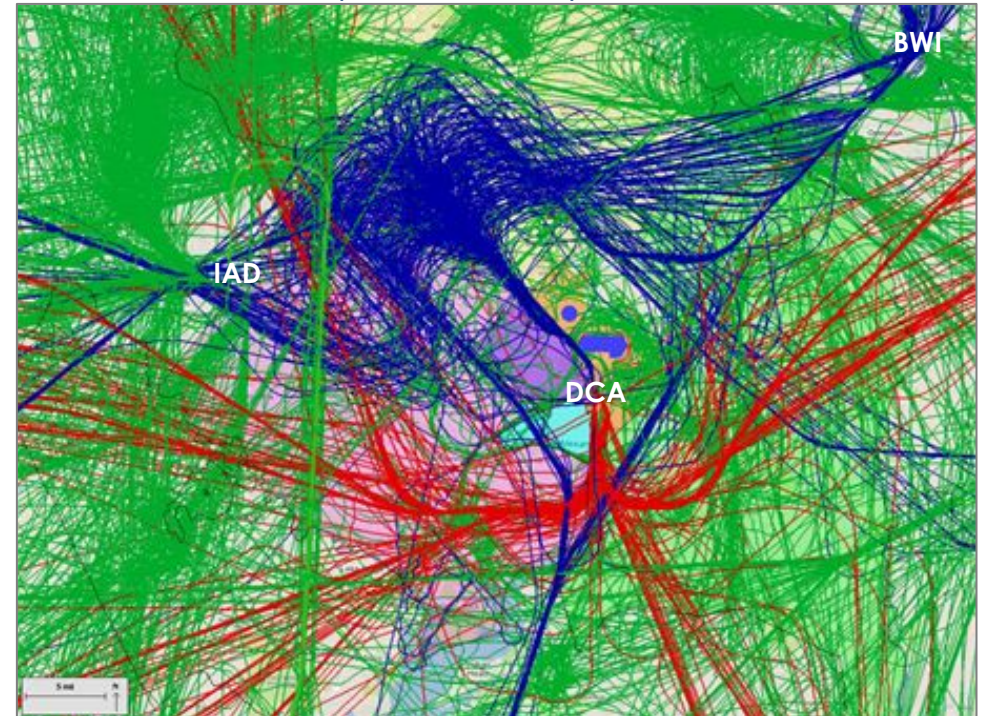
Jurisdiction Boundaries



Current North Flow (Post-NextGen): June 9, 2016



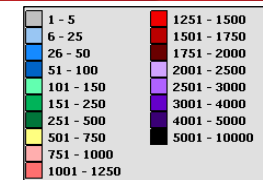
Current South Flow (Post-NextGen): June 2, 2016



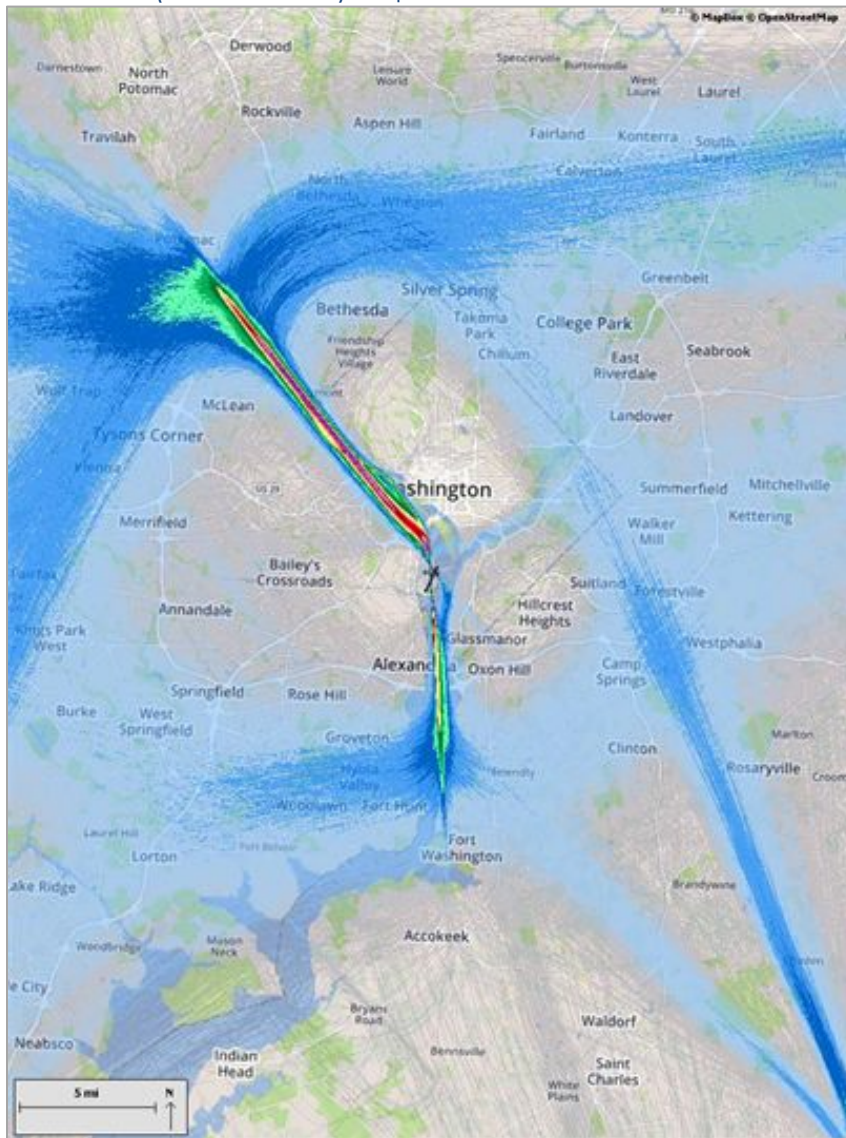


## Reagan National (DCA) - 2015 Quarterly Track Density Plots

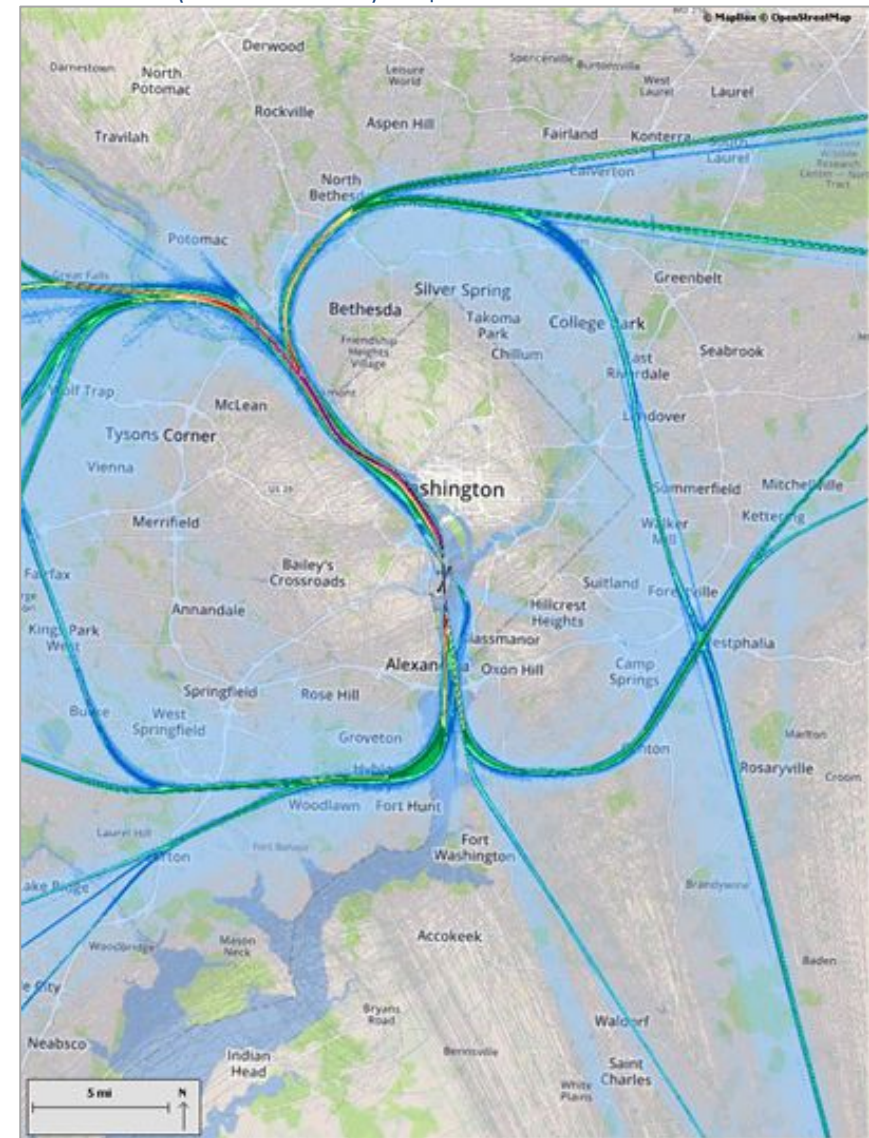
### 2015 NextGen Departure Procedure Changes



1<sup>st</sup> Quarter (Pre-NextGen) Departures



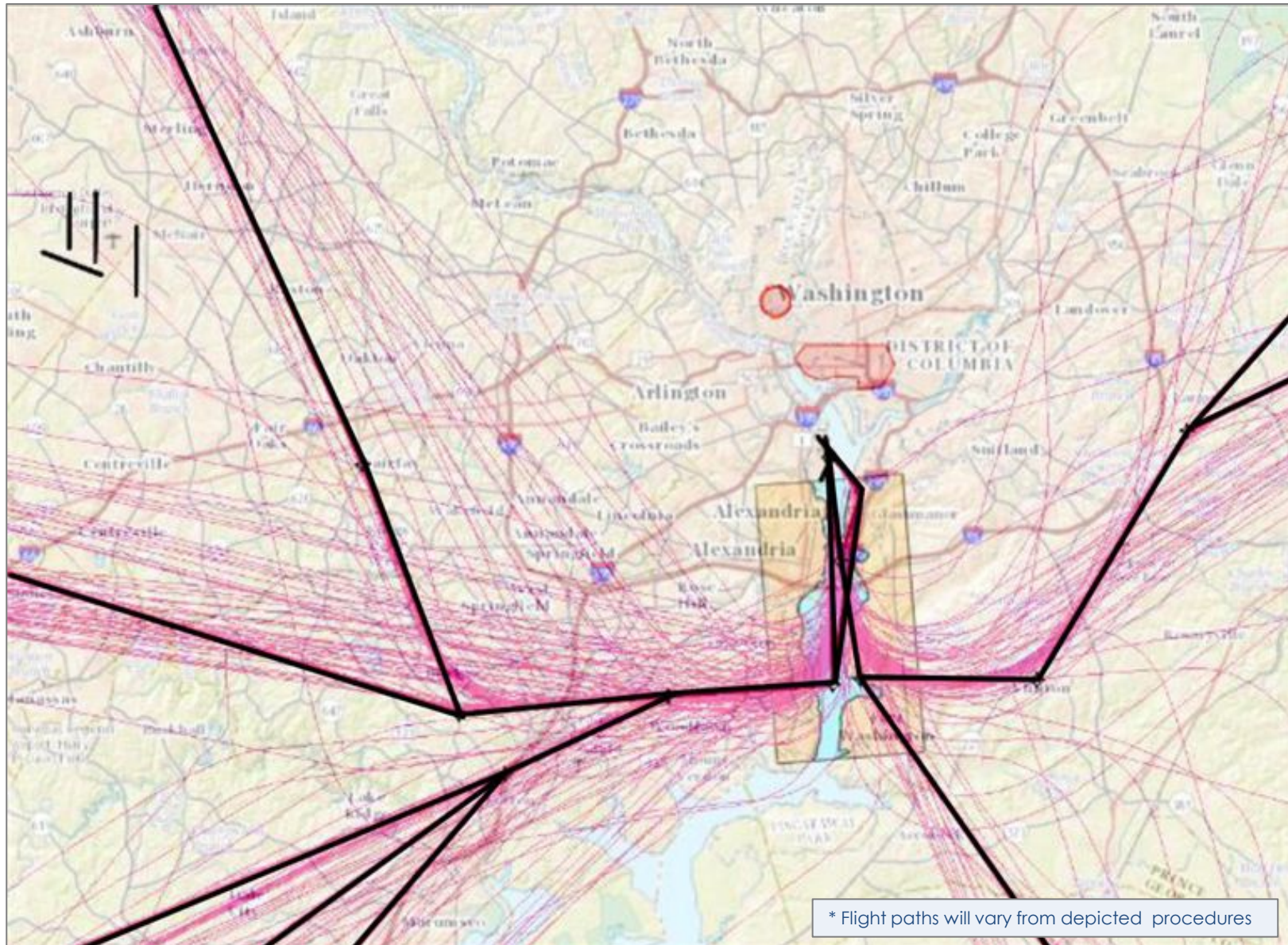
4<sup>th</sup> Quarter (Post-NextGen) Departures





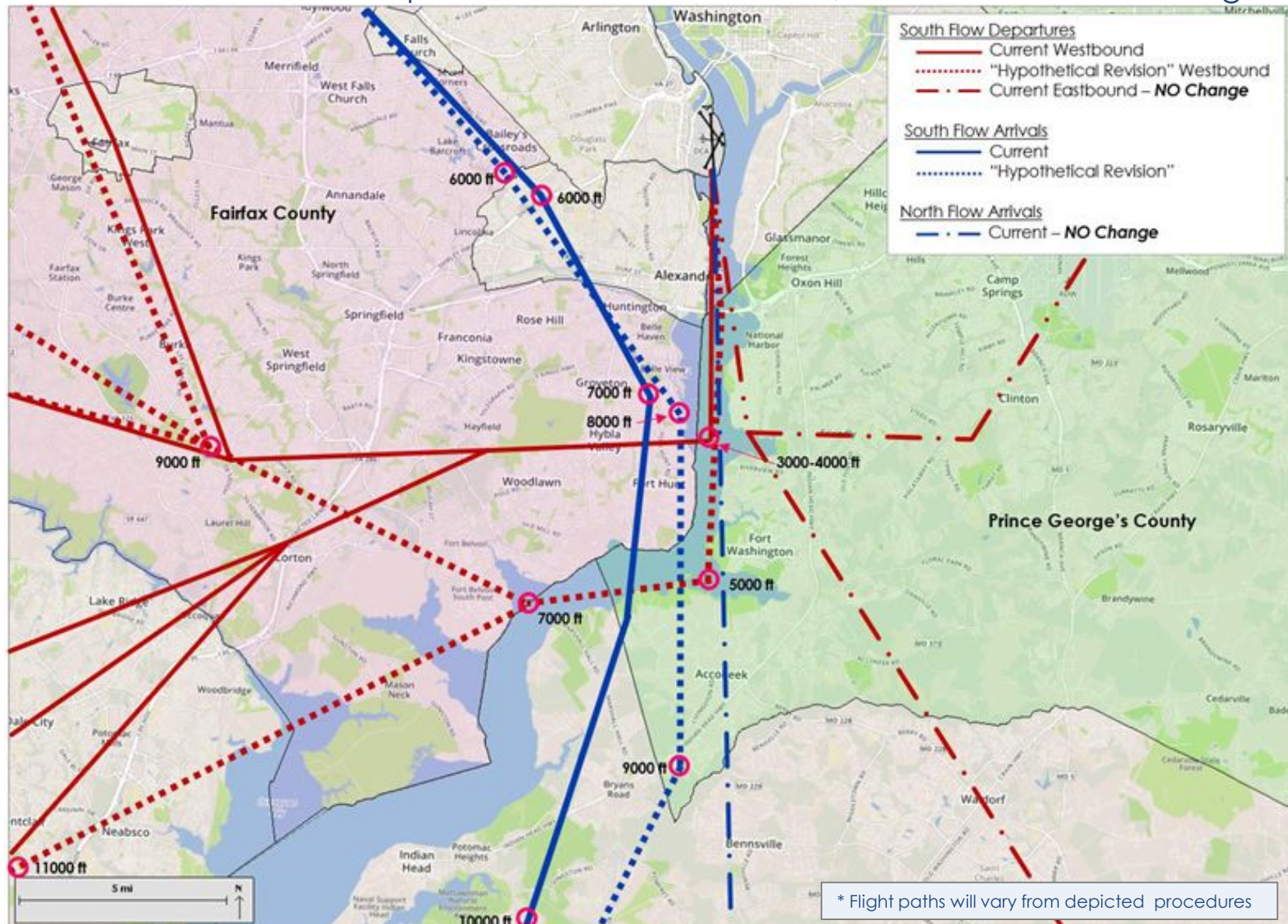
## Reagan National (DCA) - Current FAA South Flow Departure Procedures\*

Current FAA (Post-NextGen) Departure Procedures (black) with Actual Flight Tracks (red)



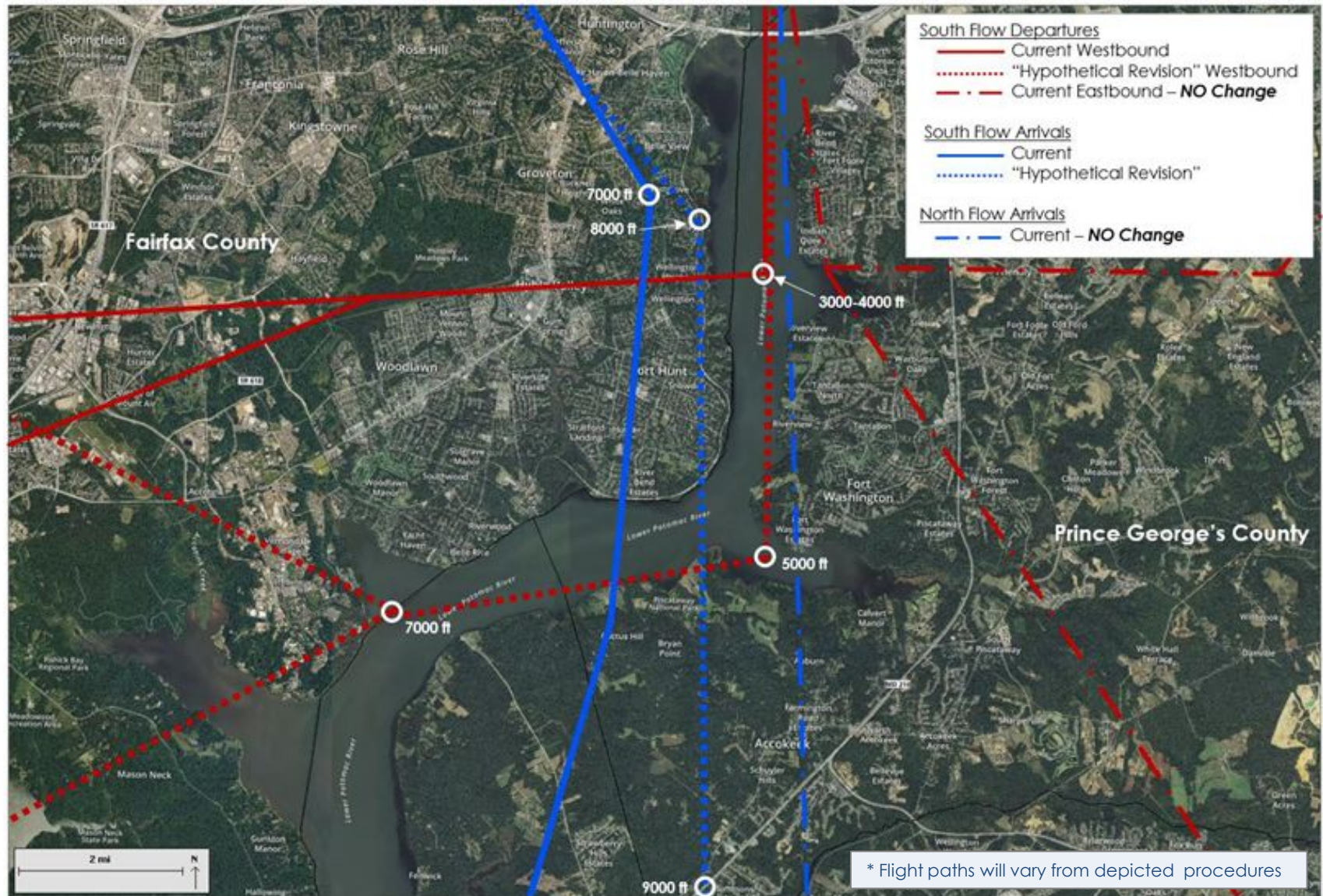


# Reagan National (DCA) – Current FAA South Flow Procedures\* (Regional) and Hypothetical Revisions under Discussion by DCA Noise Working Group to “**Maximize Over Water, Minimize Over Land**” Flight Times



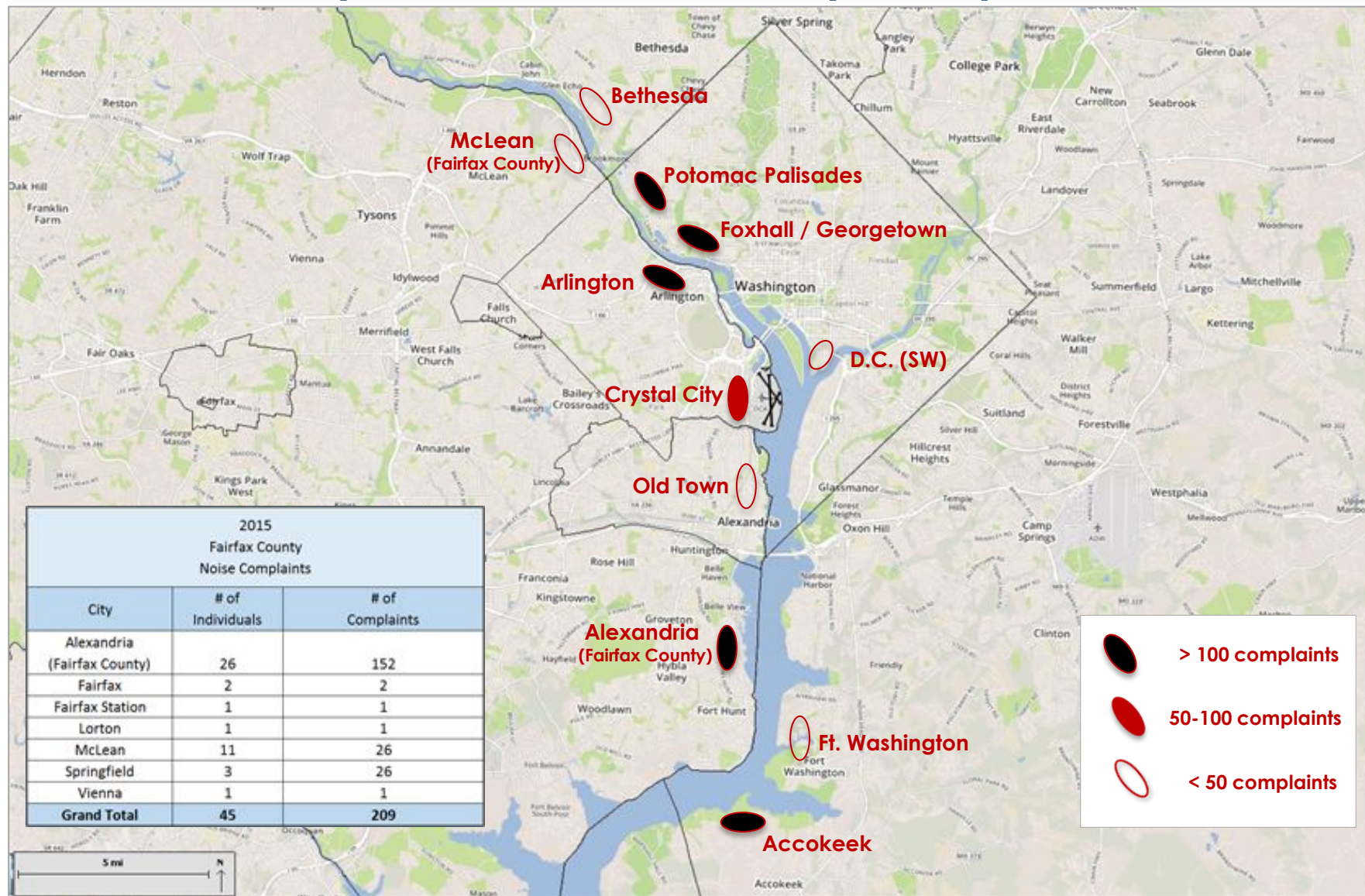


**Reagan National (DCA)** – Current FAA South Flow Procedures\* (Close-in) and Hypothetical Revisions under Discussion by DCA Noise Working Group to **“Maximize Over Water, Minimize Over Land”** Flight Times





## 2015 Frequent DCA Community Complaint Areas



## What is MWAA Doing About Community Noise Concerns?

### → DCA Community Noise Working Group

- Facilitate discussions with citizens, FAA and airlines to address noise issues
- Forward noise-abatement recommendations to FAA for consideration
- Discuss opportunities to minimize impacts on neighborhoods

### → Airline Engagement

- MWAA CEO, Jack Potter, requested corporate airlines to reduce or eliminate louder aircraft operating at Reagan National, as well as the implementation of flight procedures that **“Maximize Over Water, Minimize Over Land”** flight times
- Attend airline Chief Pilot meetings to relay community concerns and discuss noise abatement procedure
- Enforce DCA Nighttime Noise Rule (issued 36 citations in 2015)

### → Congress / Regulatory Agencies

- Oppose any changes in current High Density “Slot” and Perimeter Rules

### → Noise Information Office

- Broker discussions with FAA and airlines regarding potential flight-path modifications
- Meet with individuals and citizen groups to address noise issues
- Provide on-line tools for citizens to track flight paths and altitudes
- Maintain the noise monitor system (for information only)

## DCA Community Noise Working Group

### ✈ Mission and Structure

- ✈ Mission: Identify potential noise-mitigation solutions for FAA consideration
- ✈ Voting Members include 12 community representatives appointed by their local elected official and 2 airline representatives:
  - ✈ Airlines: American Airlines, Metropolitan Washington Airlines Committee
  - ✈ DC: Wards 2, 3, 6, 7, 8
  - ✈ MD: Montgomery County (District 1), Prince George's County (District 8)
  - ✈ VA: Arlington County (North & South), City of Alexandria, Fairfax County (Dranesville & Mt Vernon Districts)
- ✈ MWAA and FAA serve as non-voting, advisory Working Group members
- ✈ MWAA also serves as the facilitator for Working Group meetings and forwards recommendations to the FAA after they have been approved and endorsed by a Working Group majority
- ✈ Congressional, local government staff also attend Working Group meetings
- ✈ Established in October 2015 and meets monthly thru 2016

### ✈ Focus Areas

- ✈ ***"Maximize Over Water, Minimize Over Land"*** flight times
- ✈ Noise-abatement flight procedures
- ✈ FAA's use of North versus South Flow procedures
- ✈ Altitudes for arriving, departing flights
- ✈ Airport hours of operation
- ✈ Roles, responsibilities of airport, airlines, FAA
- ✈ Emerging aircraft technologies
- ✈ DCA Nighttime Noise Rule (limitations and enforcement)
- ✈ Noise monitoring systems



## Conclusions

- **FAA has exclusive jurisdiction over airspace issues: flight path, altitude, flow direction**
- **Changing flight patterns is a regional issue; Implementing changes over one community can have implications for other communities**
- **MWAA is committed to working with FAA, airlines and communities to identify alternatives for FAA and airlines consideration**





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